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10/507,391

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Michael Fink

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EXAMINER

SMITH, CHAIM A

ART UNIT

PAPER NUMBER

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MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/507,391

**Applicant(s)**

FINK ET AL

**Examiner**

CHAIM SMITH

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-29 is/are pending in the application.
- 4a) Of the above claim(s) 18 - 22 and 27 - 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-17 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 12-29 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 09/10/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

2. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 12 – 17 and 23 – 26, drawn to a method for conducting a cooking process in a cooking chamber of a cooking appliance using a cooking process probe.

Group II, claim(s) 18 – 22 and 27 - 29, drawn to a cooking appliance.

3. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the common technical feature is a cooking chamber and a cooking process probe wherein if the probe is not properly inserted into an item being cooked a warning signal is emitted. Doi USPN 4,309,585 discloses a cooking chamber (microwave oven) equipped with a cooking process probe wherein if the probe is not properly inserted into the item being cooked a warning signal to the cooking program is initiated (col.1, ln 43 - 48). There is therefore a lack of unity of invention *a posteriori* since the common technical feature does not define a contribution over the prior art.

4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

5. The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. During a telephone conversation with Michael Furmanek on February 19, 2009 a provisional election was made with traverse to prosecute the invention of a method for conducting a cooking process in a cooking chamber of a cooking appliance using a cooking process probe, claims 12 – 17 and 23 - 26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18 – 22 and 27 - 29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Claim Objections***

8. Claims 12, 14, and 16 are objected to because of the following informalities: in claim 12, on page 3, in lines 12 and 22 and on page 4, line 5 wherein the claim reads "an electric, magnetic, and electromagnetic field", it appears this should read "an

electric, magnetic, or electromagnetic field". In claim 12, page 3, line 28 wherein the claim reads "at least one of moved and positioned", it appears this should read "at least one of moved or positioned". Further in claim 12 the phrase "at least on of at least one of" appears. In claim 14 wherein the claim reads "at least one of a beginning of the cooking process, an end of the cooking process, and an actuation of a cooking chamber door", it appears this should read "or an actuation of a cooking chamber door". In claim 16 reference number 20 is not in parenthesis.

9. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 15, 16 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
12. Regarding claim 15, it is unclear what is meant by "the detecting is carried out by at least one of over time and by forming time derivatives". The examiner has interpreted this as 'the detecting is carried out over a period of time or by the formation of time derivatives.'
13. Regarding claim 16, examiner is unable to reasonably infer how the value to be compared with at least one set point value in order to detect non-insertion of the cooking process probe is determined. Is a variable of the item being cooked required as well as taking the derivative of said variable or can the variable alone be compared

with at least one set point value? Are the determined variable of the item being cooked, the determined variation over time, and the determined derivative required to be compared with at least one set point value or can only one of the determinants be compared?

14. Regarding claim 25, is the measuring probe the same as the cooking process probe of the previous claims or not necessarily?

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 23 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Doi USPN 4,309,585.

17. Regarding claim 23, Doi teaches a method for conducting a cooking process in a cooking chamber of a cooking appliance using a cooking process probe which is to be inserted into an item being cooked wherein a variable of the item being cooked (temperature) is detected. At a predetermined time (cook start) an automatic monitoring to detect non-insertion of the cooking process probe is performed and if non-insertion is detected a warning signal is emitted ('585; col. 1, ln 23 – 35

18. Regarding claim 26, Doi provides a display unit for displaying the temperature detected by a cooking process probe. Detecting whether or not the probe is being

grasped could be accomplished by simply grasping the probe and observing the temperature change on the display.

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. Claims 12 – 14, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi USPN 4,309,585 in view of Hess DE 3,119,496.

22. Regarding claims 12 – 14 and 23, Doi teaches a method for conducting a cooking process in the cooking chamber of a cooking appliance using a cooking process probe which is to be inserted into an item being cooked wherein at a predetermined time (cook start) an automatic monitoring to detect non-insertion of the cooking process probe is performed ('585; col. 1, ln 23 - 35). The cooking process probe of Doi is of the contact type in that it is in contact with the food item ('585; col. 6, ln 1 - 2) and the sensors are mounted within the probe. Since contact temperature

sensors use varying voltage or resistance values as their output signals to vary an electric field the non-insertion of a cooking process probe is therefore determined by a change in conductivity or resistance values which are thereby changing the characteristics of an electric field. Further Doi teaches a monitoring of the probe is carried out and if non-insertion of the cooking process probe is detected a warning signal is emitted ('585; col. 2, ln 7 – 16)

23. Doi does not teach the cooking process probe as being in its measuring position in a positioning device. Hess however discloses the use of a positioning device (band) with a cooking process probe (figure 1). Hess further teaches the use of the positioning device to hold said probe in place ('496; page 4, ln 15 – 20 of paragraph 1). It therefore would have been obvious to one of ordinary skill in the art at the time of the invention to have used a positioning device with the cooking process probe of Doi as taught by Hess. One of ordinary skill in the art would have been motivated to do so in order to ensure the probe would remain in the item being cooked.

24. Regarding claim 25, Doi in view of Hess teaches the use of a positioning device with a cooking process probe. Whether or not the cooking process probe is in a measuring position in said positioning device can be detected by visual inspection.

25. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi USPN 4,309,585 in view of Hess DE 3,119,496 further in view of Löffler WO 98/48679.

26. Doi in view of Hess is relied upon with respect to the rejection of claim 12 as set forth above. Regarding claims 15 and 16, Doi in view of Hess does not teach the



detecting as carried out by the formation of time derivatives. Löffler however teaches a cooking process that is guided by the formation of time derivatives ('679; page 3, ln 1 – 29). Löffler further teaches that the use of derivatives allows for the extrapolation of data to allow the calculation of an exact ideal cooking completion time (punktlandung) by comparison to a set point value ('679; page 5, ln 6 – 16). It therefore would have been obvious to one of ordinary skill in the art at the time of the invention to have used derivatives of the detected variable of the item being cooked with respect to time in order to calculate the completion of the cooking process. One of ordinary skill in the art would have been motivated to do so in order to calculate an exact cooking completion time in order to insure the item being cooked is done to perfection.

27. Further regarding claim 16 Doi in view of Hess further in view of Löffler teaches that the non-insertion of the cooking probe would be detected by a pre-testing of input variables that takes place prior to the start of the cooking process ('679; page 12, ln 24 – 30).

28. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doi USPN 4,309,585 in view of Hess DE 3,119,496 further in view of Yoshida USPN 4,350,858.

29. Doi in view of Hess is relied upon with respect to the rejection of claim 12 as set forth above. Regarding claim 17, Doi in view of Hess does not teach the use of multiple warning signals. Yoshida however teaches the use of multiple alarms to notify an operator that a cooking process probe is not properly placed (predetermined connection state). Yoshida further suggests the use of an alarm is not limited to a cooking process

probe. ('858; col. 2, ln 5 – 9 and col. 11, ln 43 - 51). It therefore would have been obvious to one of ordinary skill in the art at the time of the invention to have used multiple alarms to indicate the improper placement of the cooking process probe as taught by Doi in view of Hess in a retaining device or positioning device to alert an operator as suggested by Yoshida. One of ordinary skill in the art would have been motivated to do so in order to ensure proper placement of the probe in order to receive the expected benefit of a properly cooked item.

30. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doi USPN 4,309,585 in view of Kaneshiro USPN 4967049.

31. Doi is relied upon with respect to the rejection of claim 23 as set forth above. Regarding claim 24, Doi does not teach the use of a retaining device in the cooking chamber. Kaneshiro however teaches the use of a retaining device (adjusting ring) to retain a cooking process probe in a desired position in a cooking chamber (col. 3, ln 30 – 33). Kanishiro further teaches the use of the retaining device will prevent damage to the probe during the cooking process (col. 3, ln 24 – 29). It therefore would have been obvious to one of ordinary skill in the art to have provided a retaining device in the cooking chamber of Doi as taught by Kaneshiro. One of ordinary skill in the art would have been motivated to do so in order to prevent damage to the probe. Further regarding claim 24, whether or not the cooking process probe would be in a standby position in the retaining device can be determined by visual inspection.

***Conclusion***

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAIM SMITH whose telephone number is (571)270-7369. The examiner can normally be reached on Monday-Thursday 7:30-5:00.
33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Roy Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
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Chaim Smith  
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26 February 2009